



These units are : (1) The Napier Rapier VI (360 h.p. at 4,000 ft.) ; (2) Rolls-Royce Kestrel XVI (690 h.p. at 11,000 ft.) ; Bristol Aquila ; Pobjoy Cataract III (88 h.p.) ; and the Wolseley Aries (shown part-sectioned) of 205 h.p.

made on the new "Six," saving the drag of external venturis. Makers: The De Havilland Aircraft Co., Ltd., Hatfield, Herts.

**POBJOY (Stand 60).**—The Pobjoy exhibit will be similar to that recently shown at Stockholm. That is to say there will be a Niagara III complete with a direct-cranking electric starter, 150-watt engine-driven generator, and two Pobjoy-Tecalemit fuel pumps. There is also to be an uncowled Cataract III, which is in effect a derated version of the Niagara III, giving a maximum output of 88 h.p. at 3,525 ft.

Complete installations of the Niagara III will be seen in the Scion aircraft built by the same company, which will be demonstrated during the flying display. The neat cowling and baffling system is supplied as an integral part of the Niagara III, and permits high aerodynamic and cooling efficiency and a distinctly modern appearance. Makers: Pobjoy Air-motors and Aircraft, Ltd., Rochester, Kent.

**NAPIER (Stand 68).**—Since the Napier Dagger and Rapier were exhibited in the "static" section last year the Dagger has been in quantity production for installation in Hawker Hector army co-operation machines for the R.A.F., and the Rapier has been installed in the new Fairey light reconnaissance seaplane, Blackburn H.S.T.10, and in the upper component of the Short-Mayo composite aircraft.

Another opportunity will be afforded to inspect both models again this year. The Dagger is produced in fully and moderately supercharged forms, their ratings being 695 h.p. at 10,000ft. and 725 h.p. at 3,500ft. The latest version of the Rapier (this is the type for the upper Short-Mayo component) is the Series VI, moderately supercharged to give its rated output of 360 h.p. at 4,000 ft. The maximum power is 395 h.p. at 5,800ft. Makers: D. Napier and Son, Ltd., Acton, London, W.3.

**ROLLS-ROYCE (Stand 67).**—The "hush-hush" Merlin on the Rolls-Royce stand is bound to gather an admiring and wondering crowd. Admiring because of the fine lines and generally efficient appearance of the unit, and wondering because figures for the power output, weight, etc., have not yet been released. It has been stated that the power is

considerably higher than that of any engine at the moment in service with the R.A.F., which means that it is at the very least of 900 h.p. Just how much more, we must wait and see. It goes almost without saying that it is a 12-cylinder Vee type liquid-cooled engine. It is mounted in the new Hawker and Supermarine fighter monoplanes.

In addition there is to be a Kestrel XVI, the latest development in a famous series. It develops a normal output of 690 h.p. at 11,000ft., and 745 h.p. at 14,500ft. and maximum r.p.m. It may be remembered that the rated power of the original supercharged Kestrel was 480 h.p. The Kestrel XVI, by the way, has been ordered for the new Junkers Ju.86 commercial monoplanes to be supplied to South Africa. Makers: Rolls-Royce, Ltd., 14-15, Conduit Street, London, W.1.

**WOLSELEY (Stand 59).**—The newest and the most powerful engine in the Wolseley exhibit will doubtless dominate this stand, because it has only recently been developed. It is the 440 h.p. Libra 9-cylinder model. The other units to be seen are the 155 h.p. Aquarius, 205 h.p. Aries, 230 h.p. Scorpius, and the 250 h.p. Scorpio Mk. II, the last-mentioned engine being rated at 5,000ft. and operates, like the Libra, on fuel of 87 octane number, which permits a compression ratio of 6.5 : 1. All the types except the Aquarius are geared.

The new Libra operated at full throttle and maximum r.p.m. at 7,300ft. gives 505 h.p., and for take-off offers 495 h.p. at maximum permissible boost. The weight is 725 lb. So far this unit has not been seen in public installed in an aircraft. The Scorpio, however, is becoming a familiar sight in the Airspeed Envoy transport monoplane. Makers: Wolseley Aero Engines, Ltd., Ward End, Birmingham.

#### Dry but Undaunted

THE Cirrus Minor engine in the B.A. Swallow which, owing to a misunderstanding, ran out of oil in the Manx Air Derby, suffered no ill effects and was flown back from the Island on the following day. The occurrence certainly shows that the Minor will stand a lot of punishment.